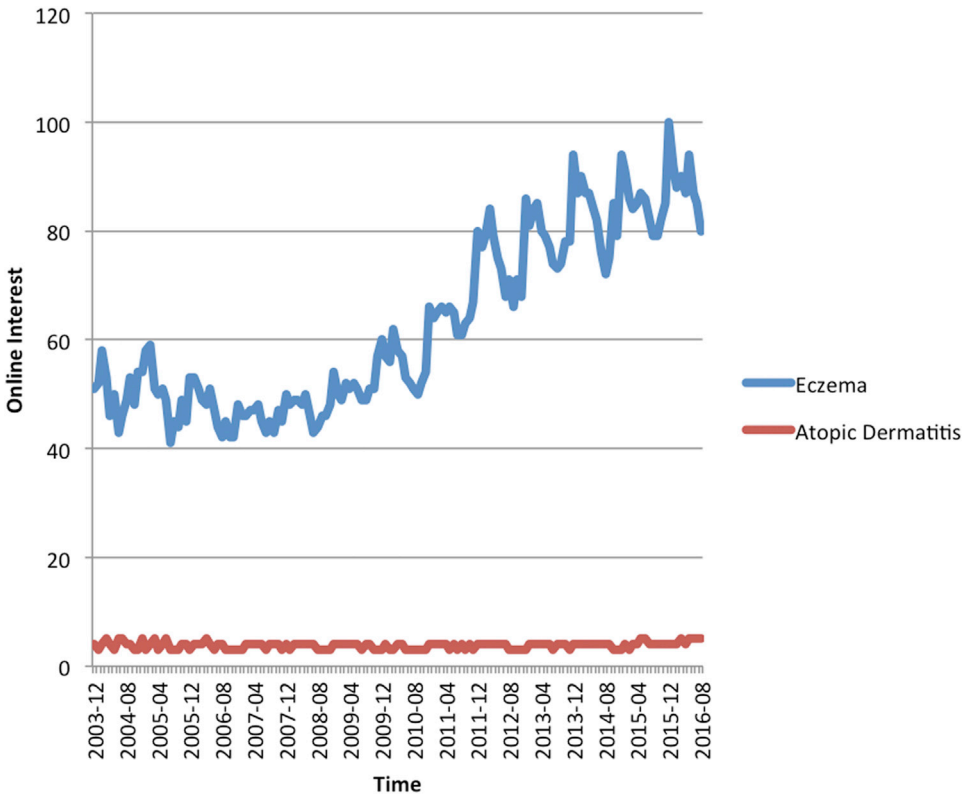

Fig 1. Relative Google search interest for "eczema" and "atopic dermatitis" from December 2003 through August 2016. The y-axis depicts search interest relative to the highest point on the chart (a value of 100 represents peak popularity for the search term, while a value of 50 means that the term is half as popular). Data source: Google Trends (www.google.com/trends).[4]

Table I. Number of websites containing information consistent with the American Academy of Dermatology guidelines, by search term used

Search term	Consistent, n (%)	Inconsistent, n (%)	Not relevant, n (%)
Eczema treatment	13 (32.5)	18 (45.0)	9 (22.5)
Atopic dermatitis treatment	12 (30.0)	17 (42.5)	11 (27.5)
Overall	25 (31.3)	35 (43.8)	20 (25.0)

4. Google (2016) Google Trends. Available at: http://www.google.com/trends/. Accessed September 3, 2016.

http://dx.doi.org/10.1016/j.jaad.2017.01.054

Itch intensity in moderate-to-severe plaque psoriasis versus atopic dermatitis: A meta-analysis

To the Editor: Atopic dermatitis is commonly referred to as the "itch that rashes,"[1] whereas plaque psoriasis has not traditionally been viewed as a pruritic dermatosis. More recently, the role of pruritus in psoriasis has emerged as an important symptom affecting quality of life, and clinical trials for psoriasis have begun using itch scores more consistently as an outcome measure.[2,3] To date, there have been no studies directly comparing itch intensity in atopic dermatitis and plaque psoriasis. This meta-analysis, performed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement from the Cochrane Collaboration guidelines, used pooled data from randomized, clinical trials to compare mean baseline pruritus scores in these 2 diseases.

An electronic search was conducted in PubMed, using the terms "atopic dermatitis or psoriasis," a list of systemic therapies used to treat these conditions, and "itch or pruritus." In addition, filters limiting the results to "clinical trials" and "humans" were placed. Relevant publications were also found by searching reference lists. Articles were selected using the following inclusion criteria: randomized trials using systemic therapies to treat adults with moderate to severe plaque psoriasis or atopic dermatitis, and available baseline pruritus data on a 10- or 100-point numerical rating scale or visual analogue scale.

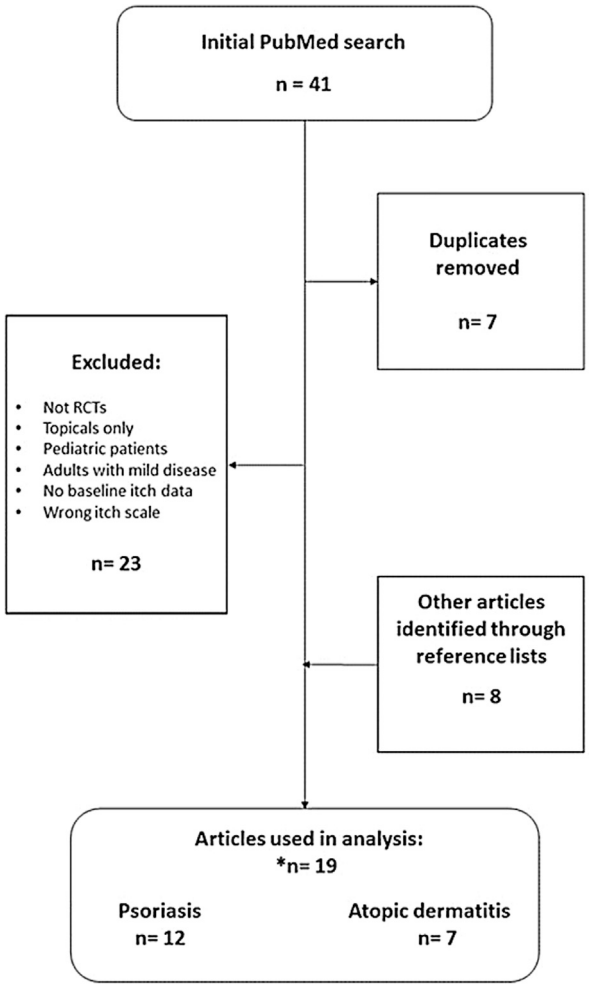

Fig 1. Study selection flow diagram. *RCTs*, Randomized, controlled trials; *n*, number of articles. *A total of 22 RCTs (13 psoriasis, 9 atopic dermatitis) were presented in 19 articles (2 of the articles included data from multiple trials).

Baseline pruritus data were abstracted from each article. If a 10-point scale was used, all values were multiplied by 10 to allow for synthesis of data on a 100-point scale. The data were weighted on the basis of the number of subjects in each study arm, and overall mean itch scores for atopic dermatitis and psoriasis were calculated. The 95% confidence intervals were constructed around the weighted means, using an α of 0.05 and n values equal to the number of trials included in each arm, and statistical differences were considered to be significant when there was no overlap between the 2 intervals.

Forty-one articles were identified from the initial search. Seven articles with duplicate data were removed, 23 articles were removed according to the exclusion criteria, and 8 additional articles were identified through reference lists. This resulted in a total of 19 included articles, which presented data from 22 trials (Fig 1 and Supplemental Table I, available at http://www.jaad.org). The weighted mean baseline pruritus scores were 63.03 for psoriasis and 62.87 for atopic dermatitis. There was no statistically significant difference between the 2 groups (Fig 2).

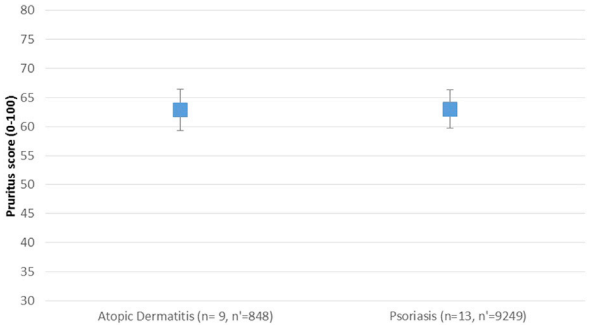

Fig 2. Weighted mean baseline pruritus scores in patients with psoriasis and atopic dermatitis with 95% confidence intervals. *n*, Number of trials; *n'*, number of subjects.

In conclusion, although psoriasis is traditionally viewed as less pruritic than atopic dermatitis, there is no significant difference in mean baseline itch scores in patients warranting systemic treatment. Pruritus levels probably are affected by a variety of confounding factors; however, this does suggest that overall, itch is a more significant component of psoriasis than previously recognized. Pruritus in psoriasis has been associated with occupational impairment,[4] anxiety, depression, and a negative impact on overall quality of life, mood, concentration, sleep, sexual desire, and appetite.[5] Pruritus may also worsen psoriatic disease by increasing scratching and subsequent koebnerization.

Fortunately, an improvement in Psoriasis Area and Severity Index score with treatment has been shown to correlate with reduced itch severity and improved quality of life.[2] Further research is needed to elucidate the relationship between psoriasis and pruritus. In addition, pruritus should continue to be included as an outcome measure in clinical trials, as it appears to have a substantial impact on treatment satisfaction and quality of life.

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Funding sources: None.

Conflicts of interest: AK has been a consultant and investigator for Abbvie, Janssen, Novartis, Pfizer,